Fig 1

PINC Layer	Functionality
Application	- This is the actual application, and provides the services that are directly available to system users. e.g., true distributed control network application.
Smart Network	- This is the interface between complex network applications and the underlying physical network. It provides network services for applications.
Physical	- Underlying physical network.

Fig 2

Network Router Node III Type I Network (Wired)
III Type II Network (Wired)

Nctwork End Node Type III Network (Wireless)

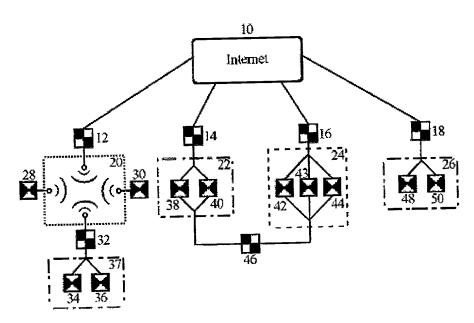


Fig 3

- Bit Timing, voltages Physical Network Access	Physical Medium	
- Division of frames into bit stream and vice versa Managing damaged, duplicate and lost frames	Physical Transmission	Physical
 Computing optimal network paths Network load balancing Network Quality of Service (QoS) 	Network Routing	
- Packet transport services, connection-oriented and connectionless.	Packet Transport	Smart Network
- Data encryption: public- and secret-key algorithms Authentication.	Encryption	
- Complex network applications.	Application	Application
Functionality	PINC Sublayer	PINC Layer